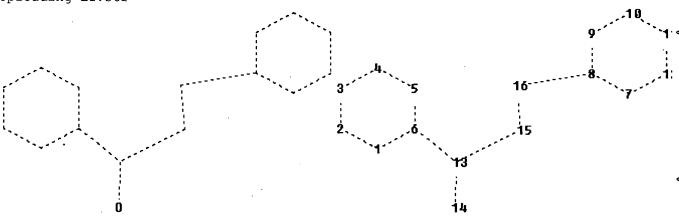


Structure attributes must be viewed using STN Express query preparation: Uploading L1.str



chain nodes :
13 14 15 16
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
6-13 8-16 13-14 13-15 15-16
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 6-13 7-8 7-12 8-9 8-16 9-10 10-11 11-12 13-14

Connectivity :

13-15 15-16

1:3 X maximum RC ring/chain 2:3 X maximum RC ring/chain 3:3 X maximum RC ring/chain

4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum

RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain

11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:1

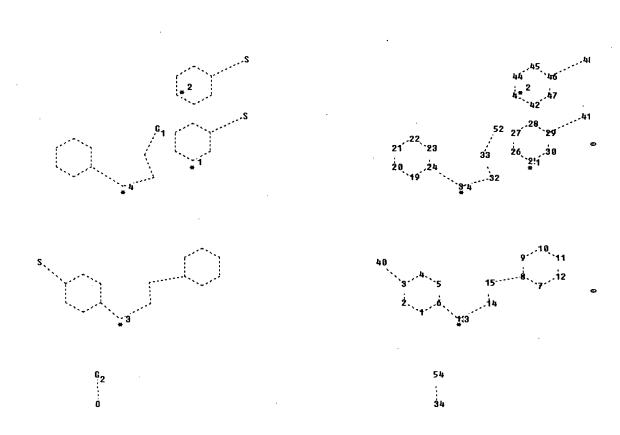
E exact RC ring/chain 15:3 X maximum RC ring/chain 16:3 X maximum RC ring/chain Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS

L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation: Uploading L3.str



chain nodes :

13 14 15 31 32 33 34 40 41 48 52 54

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 19 20 21 22 23 24 25 26 27 28 29 30 42 43 44 45 46 47

chain bonds :

3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 19-20 19-24 20-21

21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 42-43 42-47 43-44 44-45 45-46

46-47

exact/norm bonds :

29-30 29-41 31-32 32-33 33-52 34-54 42-43 42-47 43-44 44-45 45-46 46-47 46-48

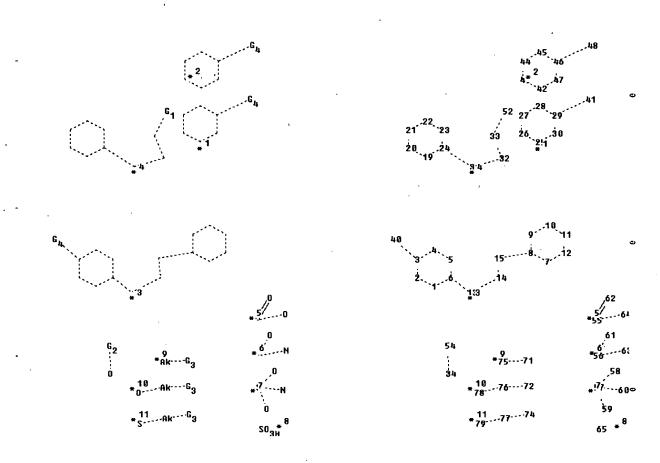
G1:[*1],[*2]

G2:[*3],[*4]

Connectivity:

- 1:3 X maximum RC ring/chain 2:3 X maximum RC ring/chain 3:3 X maximum RC ring/chain
- 4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum
- RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain
- 11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:3
- X maximum RC ring/chain 15:3 X maximum RC ring/chain 19:3 X maximum RC ring/chain 20:3 X maximum
- RC ring/chain 21:3 X maximum RC ring/chain 22:3 X maximum RC ring/chain 23:3 X maximum RC ring/chain
- 24:3 E exact RC ring/chain 25:3 X maximum RC ring/chain 26:3 X maximum RC ring/chain 27:3
- X maximum RC ring/chain 28:3 X maximum RC ring/chain 29:3 X maximum RC ring/chain 30:3 X maximum
- RC ring/chain 31:3 E exact RC ring/chain 32:3 X maximum RC ring/chain 33:3 X maximum RC ring/chain
- 34:1 E exact RC ring/chain 42:3 X maximum RC ring/chain 43:3 X maximum RC ring/chain 44:3
- X maximum RC ring/chain 45:3 X maximum RC ring/chain 47:3 X maximum RC ring/chain Match level:
- 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
- 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS 33:CLASS 34:CLASS 40:CLASS
- 41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 52:CLASS 54:CLASS
- L5 2322 SEA FILE=REGISTRY SSS FUL L3 AND L1 L6 STR
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation: Uploading L6.str



```
chain nodes :
                                                                                                                                                                                 54
                                                                                                                                                                                                  55
                                                                                                                                                                                                                  56
                                                                                                                                                                                                                                  57
                                                                                                                                                                                                                                                     58
13 14 15 31 32 33
                                                                                               34
                                                                                                               40 41 48 52
                                                                                                                                                                                                                                                                     59
                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                      62
71 72 74 75 76 77
                                                                                                  78
                                                                                                                  79
ring nodes :
1 2 3 4 5 6 7 8
                                                                                                 9 10 11 12 19 20 21 22 23
                                                                                                                                                                                                                                             24
                                                                                                                                                                                                                                                                 25
                                                                                                                                                                                                                                                                                 26
                                                                                                                                                                                                                                                                                                  27
                                                                                                                                                                                                                                                                                                                  28
30 42 43 44 45 46 47
ring/chain nodes :
60 63
chain bonds :
3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48
55-62 55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78 77-79
ring bonds :
1-2 \quad 1-\dot{6} \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 19-20 \quad 19-24 \quad 20-12 \quad 19-12 \quad 19-
21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30
                                                                                                                                                                                                                                                              42-43
44-45 45-46
46 - 47
exact/norm bonds :
1-2 1-6 2-3 3-4 3-40 4-5 5-6 6-13 7-8 7-12 8-9 8-15 9-10
                                                                                                                                                                                                                                                                                              10-11
                                                                                                                                                                                                                                                                                                                          11-12
13-14 \quad 14-15 \quad 19-20 \quad 19-24 \quad 20-21 \quad 21-22 \quad 22-23 \quad 23-24 \quad 24-31 \quad 25-26
                                                                                                                                                                                                                                                                                             25-30
                                                                                                                                                                                                                                                                                                                           26-27
27-28 28-29
29-30 29-41 31-32 32-33
                                                                                                                33-52
                                                                                                                                            34-54
                                                                                                                                                                         42-43
                                                                                                                                                                                                       42-47
                                                                                                                                                                                                                                     43-44
                                                                                                                                                                                                                                                                  44 - 45
                                                                                                                                                                                                                                                                                             45-46
                                                                                                                                                                                                                                                                                                                           46-47
46-48 55-62
55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78 77-79
```

G1:[*1],[*2]

```
10/520079
G2:[*3],[*4]
G3: [*5], [*6], [*7], [*8]
G4: [*9], [*10], [*11]
Connectivity:
1:3 X maximum RC ring/chain 2:3 X maximum RC ring/chain 3:3 X maximum RC
ring/chain
4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain
7:3 X maximum
RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X
maximum RC ring/chain
11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC
ring/chain 14:3
X maximum RC ring/chain 15:3 X maximum RC ring/chain 19:3 X maximum RC ring/chain
20:3 X maximum
RC ring/chain 21:3 X maximum RC ring/chain 22:3 X maximum RC ring/chain 23:3 X
maximum RC ring/chain
24:3 E exact RC ring/chain 25:3 X maximum RC ring/chain 26:3 X maximum RC
ring/chain 27:3
X maximum RC ring/chain 28:3 X maximum RC ring/chain 29:3 X maximum RC ring/chain
30:3 X maximum
RC ring/chain 31:3 E exact RC ring/chain 32:3 X maximum RC ring/chain 33:3 X
maximum RC ring/chain
34:1 E exact RC ring/chain 42:3 X maximum RC ring/chain 43:3 X maximum RC
ring/chain 44:3
X maximum RC ring/chain 45:3 X maximum RC ring/chain 47:3 X maximum RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:Atom 21:Atom 22:Atom
23:Atom 24:Atom
25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS 33:CLASS
34:CLASS 40:CLASS
41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 52:CLASS
54:CLASS
63:CLASS 64:CLASS
65:CLASS 71:CLASS 72:CLASS 74:CLASS 75:CLASS 76:CLASS 77:CLASS
                                                                78:CLASS
```

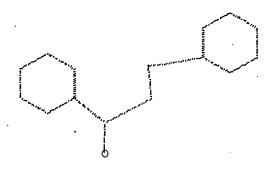
| L9 L18 L19 | 2 SE | A FILE=ZCAPLUS A FILE=ZCAPLUS A FILE=ZCAPLUS | ABB=ON | PLU=ON PLU=ON PLU=ON | L8 US2005-520079 /APPS L18 AND L9 |
|-------------------|-------|--|--------|----------------------------|---|
| => d stat que L23 | | | | | |
| L20 | 38 SE | A FILE=ZCAPLUS | ABB=ON | PLU=ON | NAJIB J?/AU |
| L21 | 70 SE | A FILE=ZCAPLUS | ABB=ON | PLU=ON | CAUMONT K?/AU OR BERTRAND |
| K?/AU | | | | | |
| L22 | 11 SE | A FILE=ZCAPLUS | ABB=ON | PLU=ON | CAUMONT B?/AU |
| L23 | 5 SE | A FILE=ZCAPLUS | ABB=ON | PLU=ON | L20 AND (L21 OR L22) |

68 SEA FILE=REGISTRY SUB=L5 SSS FUL L6

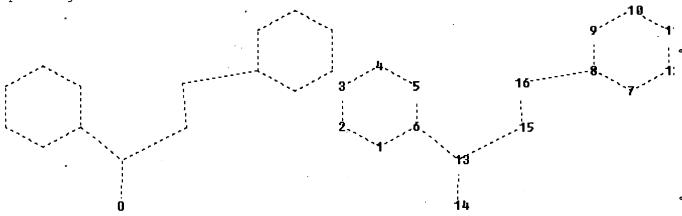
=> d stat que L24 L1 STF

79:CLASS

L8



Structure attributes must be viewed using STN Express query preparation: Uploading L1.str



chain nodes : 13 14 15 16 ring nodes : 1 2 3 4 .5 6 7 8 9 10 11 12 chain bonds : 6-13 8-16 13-14 13-15 15-16 ring bonds : 4-5 5-6 7-8 7-12 8-9 1-2 1-6 2-3 3-4 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-6 6-13 7-8 7-12 8-16 9-10 10-11 11-12 13-14 8-9 13-15 15-16

Connectivity:

 $1:3\ X\ \text{maximum}\ \text{RC}\ \text{ring/chain}\quad 2:3\ X\ \text{maximum}\ \text{RC}\ \text{ring/chain}\quad 3:3\ X\ \text{maximum}\ \text{RC}$ ring/chain

4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain °7:3 X maximum

RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain

11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:1

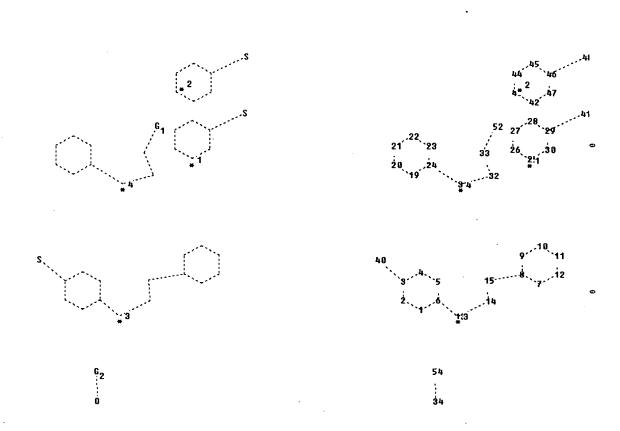
E exact RC ring/chain 15:3 X maximum RC ring/chain 16:3 X maximum RC ring/chain Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation: Uploading L3.str



chain nodes :

13 14 15 31 32 33 34 40 41 48 52 54

ring nodes :

 $1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 19 \quad 20 \quad 21 \quad 22 \quad 23 \quad 24 \quad 25 \quad 26 \quad 27 \quad 28 \quad 29$

30 42 43 44 45 46 47

chain bonds :

3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48

ring bonds :

 $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 19-20 \quad 19-24 \quad 20-12 \quad 19-12 \quad 19-12$

21

21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 42-43 42-47 43-44

44-45 45-46

46-47

exact/norm bonds :

8

27-28 28-29

29-30 29-41 31-32 32-33 33-52 34-54 42-43 42-47 43-44 44-45 45-46 46-47 46-48

G1:[*1],[*2]

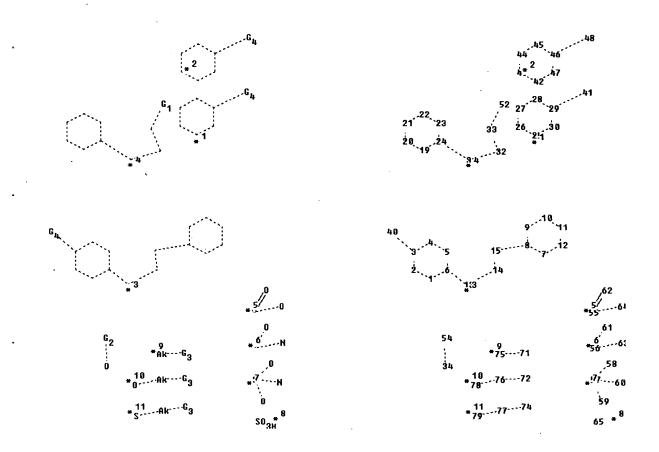
G2:[*3],[*4]

Connectivity:

- $1:3\ X\ \text{maximum}\ \text{RC}\ \text{ring/chain}$ $2:3\ X\ \text{maximum}\ \text{RC}\ \text{ring/chain}$ $3:3\ X\ \text{maximum}\ \text{RC}$ ring/chain
- 4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum
- RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain
- 11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:3
- X maximum RC ring/chain 15:3 X maximum RC ring/chain 19:3 X maximum RC ring/chain 20:3 X maximum
- RC ring/chain 21:3 X maximum RC ring/chain 22:3 X maximum RC ring/chain 23:3 X maximum RC ring/chain
- 24:3 E exact RC ring/chain 25:3 X maximum RC ring/chain 26:3 X maximum RC ring/chain 27:3
- X maximum RC ring/chain 28:3 X maximum RC ring/chain 29:3 X maximum RC ring/chain 30:3 X maximum
- RC ring/chain 31:3 E exact RC ring/chain 32:3 X maximum RC ring/chain 33:3 X maximum RC ring/chain
- 34:1 E exact RC ring/chain 42:3 X maximum RC ring/chain 43:3 X maximum RC ring/chain 44:3
- X maximum RC ring/chain 45:3 X maximum RC ring/chain 47:3 X maximum RC ring/chain Match level:
- 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:Atom 21:Atom 22:Atom
- 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS 33:CLASS
- 34:CLASS 40:CLASS
- 41:CLASS 42:Atom .43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 52:CLASS 54:CLASS
- L5 2322 SEA FILE=REGISTRY SSS FUL L3 AND L1
- L6 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation: Uploading L6.str



```
chain nodes :
13 14 15 31 32 33 34 40 41 48 52 54
                                          55
                                             56 57
                                                     58
                                                        59
                                                            61
71 72 74 75 76 77
                     78
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 19 20 21 22 23 24 25 26 27 .28 29
30 42 43 44 45 46 47
ring/chain nodes :
60 63
chain bonds :
3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48
55-62 55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78 77-79
ring bonds :
21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 42-43 42-47 43-44
44-45 45-46
46-47
exact/norm bonds :
1-2 1-6 2-3 3-4 3-40 4-5 5-6 6-13 7-8 7-12 8-9 8-15 9-10
                                                              10-11 11-12
13 - 14 \quad 14 - 15 \quad 19 - 20 \quad 19 - 24 \quad 20 - 21 \quad 21 - 22 \quad 22 - 23 \quad 23 - 24 \quad 24 - 31 \quad 25 - 26 \quad 25 - 30 \quad 26 - 27
27-28 28-29
29-30 29-41 31-32 32-33 33-52 34-54 42-43 42-47
                                                 43-44
                                                        44 - 45
                                                              45-46 46-47
46-48 55-62
55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78 77-79
```

G1:[*1],[*2]

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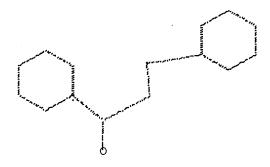
FILE COVERS 1907 - 1 Oct 2007 VOL 147 ISS 15 FILE LAST UPDATED: 30 Sep 2007 (20070930/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

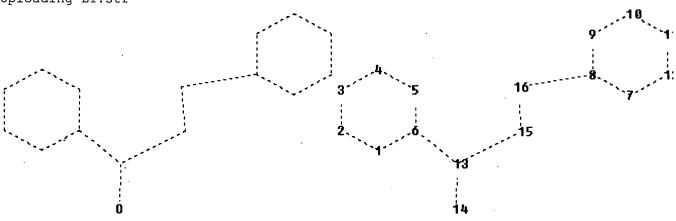
This file contains CAS Registry Numbers for easy and accurate substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L19 L1 STR

1



Structure attributes must be viewed using STN Express query preparation: Uploading L1.str



chain nodes :
13 14 15 16
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
6-13 8-16 13-14 13-15 15-16
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10exact/norm bonds :

Connectivity:

 $1\!:\!3$ X maximum RC ring/chain $2\!:\!3$ X maximum RC ring/chain $3\!:\!3$ X maximum RC ring/chain

4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum

RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain

11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:1

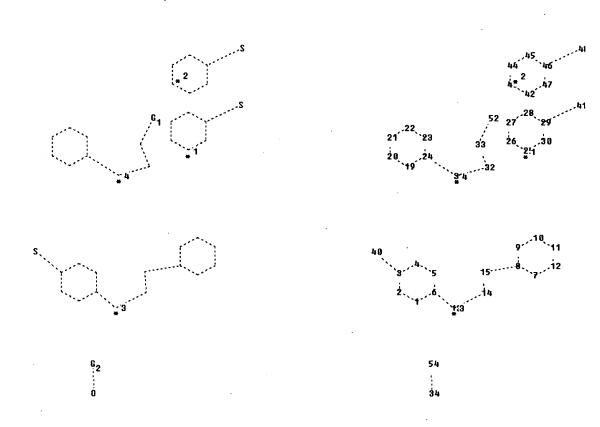
E exact RC ring/chain 15:3 X maximum RC ring/chain 16:3 X maximum RC ring/chain Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS

L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation: Uploading L3.str



chain nodes :

13 14 15 31 32 33 34 40 41 48 52 54

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 19 20 21 22 23 24 25 26 27 28 29 30 42 43 44 45 46 47

30 42 43 44 43 40 47

chain bonds :

3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 19-20 19-24 20-

21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 42-43 42-47 43-44

44-45 45-46

46-47

exact/norm bonds :

1-2 1-6 2-3 3-4 3-40 4-5 5-6 6-13 7-8 7-12 8-9 8-15 9-10 10-11 11-12 13-14 14-15 19-20 19-24 20-21 21-22 22-23 23-24 24-31 25-26 25-30 26-27

27-28 28-29

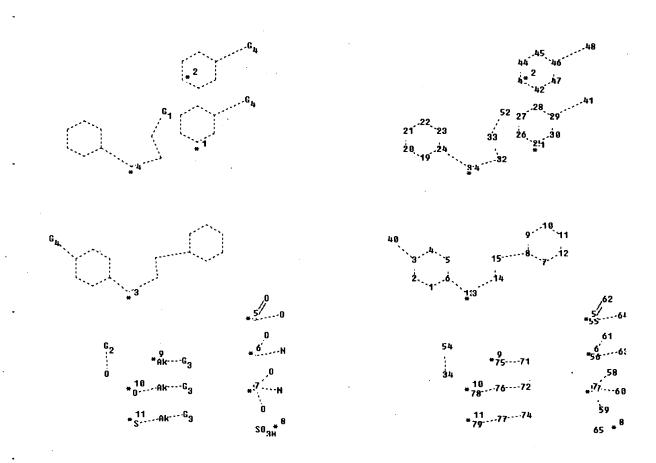
G1:[*1],[*2]

G2:[*3],[*4]

Connectivity:

- 1:3 X maximum RC ring/chain 2:3 X maximum RC ring/chain 3:3 X maximum RC ring/chain
- 4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum
- RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain
- 11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:3
- X maximum RC ring/chain 15:3 X maximum RC ring/chain 19:3 X maximum RC ring/chain 20:3 X maximum
- RC ring/chain 21:3 X maximum RC ring/chain 22:3 X maximum RC ring/chain 23:3 X maximum RC ring/chain
- 24:3 E exact RC ring/chain 25:3 X maximum RC ring/chain 26:3 X maximum RC ring/chain 27:3
- X maximum RC ring/chain 28:3 X maximum RC ring/chain 29:3 X maximum RC ring/chain 30:3 X maximum
- RC ring/chain 31:3 E exact RC ring/chain 32:3 X maximum RC ring/chain 33:3 X maximum RC ring/chain
- 34:1 E exact RC ring/chain 42:3 X maximum RC ring/chain 43:3 X maximum RC ring/chain 44:3
- X maximum RC ring/chain 45:3 X maximum RC ring/chain 47:3 X maximum RC ring/chain Match level :
- 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
- 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS 33:CLASS 34:CLASS 40:CLASS
- 41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 52:CLASS 54:CLASS
- L5 2322 SEA FILE=REGISTRY SSS FUL L3 AND L1 L6 STR
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation: Uploading L6.str



```
chain nodes :
13 14 15 31 32 33 34 40 41 48 52 54 55 56 57
                                                   58
                                                       59
                                                          61
                                                             62
71 72 74 75 76 77
                    78
                       79
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 19 20 21 22 23 24
                                                      25
                                                         26 27 28 29
30 42 43 44 45 46 47
ring/chain nodes :
60 63
chain bonds :
3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48
55-62 55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78 77-79.
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 19-20 19-24 20-
21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30
44-45 45-46
46-47
exact/norm bonds :
1-2 1-6 2-3 3-4 3-40 4-5 5-6 6-13 7-8 7-12 8-9 8-15 9-10
                                                            10-11 11-12
13-14 14-15 19-20 19-24 20-21 21-22 22-23 23-24 24-31 25-26
                                                            25-30 26-27
27-28 28-29
29-30 29-41 31-32 32-33 33-52
                             34-54 42-43 42-47
                                                43-44
                                                      44-45
                                                            45-46 46-47
46-48 55-62
55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78 77-79
```

G1:[*1],[*2]

```
G2:[*3],[*4]
```

G3: [*5], [*6], [*7], [*8]

G4:[*9], [*10],[*11]

Connectivity:

- $1\!:\!3$ X maximum RC ring/chain $2\!:\!3$ X maximum RC ring/chain $3\!:\!3$ X maximum RC ring/chain
- 4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum
- RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain
- 11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:3
- X maximum RC ring/chain 15:3 X maximum RC ring/chain 19:3 X maximum RC ring/chain 20:3 X maximum
- RC ring/chain 21:3 X maximum RC ring/chain 22:3 X maximum RC ring/chain 23:3 X maximum RC ring/chain
- 24:3 E exact RC ring/chain 25:3 X maximum RC ring/chain 26:3 X maximum RC ring/chain 27:3
- X maximum RC ring/chain 28:3 X maximum RC ring/chain 29:3 X maximum RC ring/chain 30:3 X maximum
- RC ring/chain 31:3 E exact RC ring/chain 32:3 X maximum RC ring/chain 33:3 X maximum RC ring/chain
- 34:1 E exact RC ring/chain 42:3 X maximum RC ring/chain 43:3 X maximum RC ring/chain 44:3
- X maximum RC ring/chain 45:3 X maximum RC ring/chain 47:3 X maximum RC ring/chain Match level:
- 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:Atom 21:Atom 23:Atom 24:Atom
- 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS 33:CLASS 34:CLASS 40:CLASS
- 41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 52:CLASS 54:CLASS
- 55:CLASS 56:CLASS 57:CLASS 58:CLASS 59:CLASS 60:CLASS 61:CLASS 62:CLASS
- 63:CLASS 64:CLASS
- 65:CLASS 71:CLASS 72:CLASS 74:CLASS 75:CLASS 76:CLASS 77:CLASS 78:CLASS 79:CLASS

L8 68 SEA FILE=REGISTRY SUB=L5 SSS FUL L6
L9 12 SEA FILE=ZCAPLUS ABB=ON PLU=ON L8

=> s L9 not L25

L26 9 L9 NOT L25

=> file beilstein

FILE 'BEILSTEIN' ENTERED AT 13:15:02 ON 01 OCT 2007 COPYRIGHT (c) 2007 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE LAST UPDATED ON September 26, 2007

FILE COVERS 1771 TO 2007.

*** FILE CONTAINS 10.119,480 SUBSTANCES ***

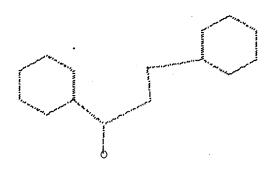
>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

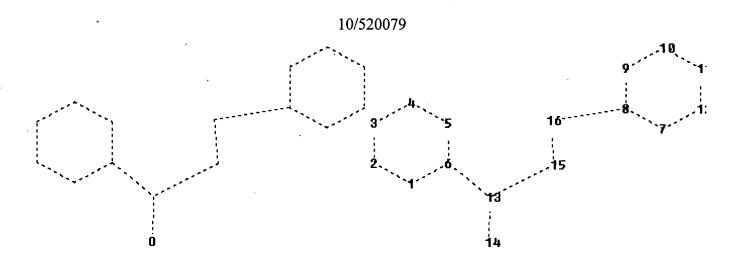
- * PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.
- * SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE
- * ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE
- * ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.
- * FOR PRICE INFORMATION SEE HELP COST

* PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.

* NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.



Structure attributes must be viewed using STN Express query preparation: Uploading L1.str



chain nodes : 13 14 15 16 ring nodes : 1 2 3 4 5 6 7 8 9 10 11 12 chain bonds : 6-13 8-16 13-14 13-15 15-16 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-6 6-13 7-8 7-12 8-16 9-10 10-11 11-12 13-14 8-9 13-15 15-16

Connectivity:

1:3 X maximum RC ring/chain 2:3 X maximum RC ring/chain 3:3 X maximum RC ring/chain

4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum

RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain

11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:1

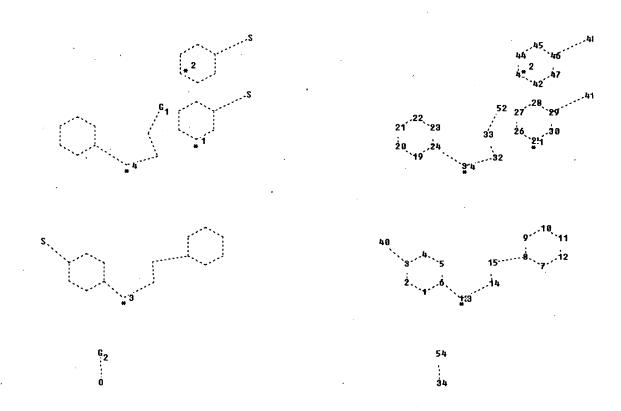
E exact RC ring/chain 15:3 X maximum RC ring/chain 16:3 X maximum RC ring/chain Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS

L3 STR

Structure attributes must be viewed using STN Express query preparation: Uploading L3.str

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



chain nodes :

 $13 \quad 14 \quad 15 \quad 31 \quad 32 \quad 33 \quad 34 \quad 40 \quad 41 \quad 48 \quad 52 \quad 54$

ring nodes :

chain bonds :

3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 19-20 19-24 20-21

21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 42-43 42-47 43-44

44-45 45-46

46-47

exact/norm bonds :

27-28 28-29

29-30 29-41 31-32 32-33 33-52 34-54 42-43 42-47 43-44 44-45 45-46 46-47 46-48

G1:[*1],[*2]

G2:[*3],[*4]

Connectivity:

1:3 X maximum RC ring/chain 2:3 X maximum RC ring/chain 3:3 X maximum RC

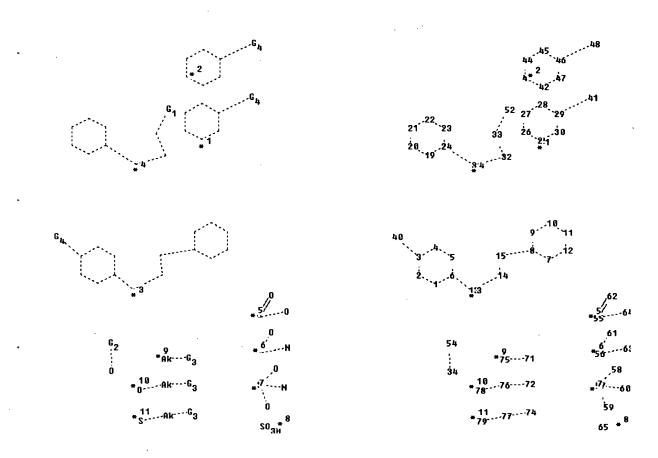
ring/chain

- 4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum
- RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain
- 11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:3
- X maximum RC ring/chain 15:3 X maximum RC ring/chain 19:3 X maximum RC ring/chain 20:3 X maximum
- RC ring/chain 21:3 X maximum RC ring/chain 22:3 X maximum RC ring/chain 23:3 X maximum RC ring/chain
- 24:3 E exact RC ring/chain 25:3 X maximum RC ring/chain 26:3 X maximum RC ring/chain 27:3
- X maximum RC ring/chain 28:3 X maximum RC ring/chain 29:3 X maximum RC ring/chain 30:3 X maximum
- RC ring/chain 31:3 E exact RC ring/chain 32:3 X maximum RC ring/chain 33:3 X maximum RC ring/chain
- 34:1 E exact RC ring/chain 42:3 X maximum RC ring/chain 43:3 X maximum RC ring/chain 44:3
- X maximum RC ring/chain 45:3 X maximum RC ring/chain 47:3 X maximum RC ring/chain Match level:
- 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:Atom 21:Atom 22:Atom
- 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS 33:CLASS
- 34:CLASS 40:CLASS
- 41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 52:CLASS 54:CLASS

L6 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation: Uploading L6.str



```
chain nodes :
13 14 15 31 32 33 34 40 41 48 52 54 55 56 57 58
                                                     59
                                                        61
71 72 74 75 76 77
                    78
                       79
ring nodes :
25 26 27 28 29
30 42 43 44 45 46 47
ring/chain nodes :
60 63
chain bonds :
3-40 6-13 8-15 13-14 14-15 24-31 29-41 31-32 32-33 33-52 34-54 46-48
55-62 55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78 77-79
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8
                            7-12 8-9 9-10 10-11 11-12 19-20 19-24 20-
21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 42-43 42-47 43-44
44-45 45-46
 46-47
 exact/norm bonds :
1-2 1-6 2-3 3-4 3-40 4-5 5-6 6-13 7-8 7-12 8-9 8-15 9-10 10-11 11-12
13-14 14-15 19-20 19-24 20-21 21-22 22-23 23-24 24-31 25-26 25-30 26-27
27-28 28-29
29-30 29-41 31-32 32-33 33-52
                             34-54 42-43 42-47 43-44
                                                    44-45
                                                          45-46 46-47
46-48 55-62
55-64 56-61 56-63 57-58 57-59 57-60 71-75 72-76 74-77 76-78
                                                          77-79
```

G1:[*1],[*2]

```
G2:[*3],[*4]
```

G3: [*5], [*6], [*7], [*8]

G4: [*9], [*10], [*11]

Connectivity:

79:CLASS

L11

- $1\!:\!3$ X maximum RC ring/chain $2\!:\!3$ X maximum RC ring/chain $3\!:\!3$ X maximum RC ring/chain
- 4:3 X maximum RC ring/chain 5:3 X maximum RC ring/chain 6:3 E exact RC ring/chain 7:3 X maximum
- RC ring/chain 8:3 E exact RC ring/chain 9:3 X maximum RC ring/chain 10:3 X maximum RC ring/chain
- 11:3 X maximum RC ring/chain 12:3 X maximum RC ring/chain 13:3 E exact RC ring/chain 14:3
- X maximum RC ring/chain 15:3 X maximum RC ring/chain 19:3 X maximum RC ring/chain 20:3 X maximum
- RC ring/chain 21:3 X maximum RC ring/chain 22:3 X maximum RC ring/chain 23:3 X maximum RC ring/chain
- 24:3 E exact RC ring/chain 25:3 X maximum RC ring/chain 26:3 X maximum RC ring/chain 27:3
- X maximum RC ring/chain 28:3 X maximum RC ring/chain 29:3 X maximum RC ring/chain 30:3 X maximum
- RC ring/chain 31:3 E exact RC ring/chain 32:3 X maximum RC ring/chain 33:3 X maximum RC ring/chain
- 34:1 E exact RC ring/chain 42:3 X maximum RC ring/chain 43:3 X maximum RC ring/chain 44:3
- X maximum RC ring/chain 45:3 X maximum RC ring/chain 47:3 X maximum RC ring/chain Match level:
- 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
- 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS 33:CLASS 34:CLASS 40:CLASS
- 41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 52:CLASS 54:CLASS
- 63:CLASS 64:CLASS 65:CLASS 71:CLASS 72:CLASS 74:CLASS 75:CLASS 76:CLASS 77:CLASS 78:CLASS

383 SEA FILE=BEILSTEIN SSS FUL L1 AND L3

L13 · 5 SEA FILE=BEILSTEIN SUB=L11 SSS FUL L6

100.0% PROCESSED 383 ITERATIONS 5 ANSWERS SEARCH TIME: 00.00.01

=> dup rem L26 L13

DUPLICATE IS NOT AVAILABLE IN 'BEILSTEIN'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

FILE 'ZCAPLUS' ENTERED AT 13:15:17 ON 01 OCT 2007

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